

(amended)

1 2. ¹⁷ The injection mold according to Claim ¹⁷ [1] wherein the
2 rotatable mold plate rotates about an axis perpendicular to the
3 relative direction of movement of the first and second mold cavity
4 members toward and away from one another.

(amended)

8 4. ² The injection mold according to Claim ² ~~1~~ [3] wherein portions
9 of the first and second mold cavity members extend past the
10 rotatable mold plate to directly engage one another through the
11 opening in the frame member on each side of the rotatable mold
12 plate when the mold is closed.

(amended)

1 9. ¹⁷ The injection mold according to Claim [1] wherein the
2 elongated members are toothbrushes with a head portion and a handle
3 portion, and wherein a first component of the two-component
4 toothbrush is used to form the head in a cavity in the first mold
5 cavity member and a corresponding cavity in the rotatable mold
6 plate, and to form a first component of the handle in mating
7 cavities between first portions of the first and second mold cavity
8 members extending through the central frame member, whereupon
9 opening of the mold by relative movement of the first and second
10 mold cavity members away from one another causes the central frame
11 member also to be located one-half the distance between the first
12 and second mold cavity members while rotating the rotatable mold
13 plate with the toothbrush head attached thereto 180° prior to the
14 next cycle of closure of the mold.

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16 10. The injection mold according to Claim 9 wherein the
17 second component of the two-component elongated toothbrush is
18 formed between second portions of the first and second mold cavity
19 and the first component of the handle of the toothbrush carried by
20 the rotatable mold plate in the central frame member.

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22 11. The injection mold according to Claim 10 further
23 including mechanism for ejecting finished two-component
24 toothbrushes from the rotatable mold plate when the first and
25 second mold cavity members are moved away from one another.
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12. The injection mold according to Claim 1 wherein the central frame member is an open rectangular frame with a top, a bottom, and first and second sides interconnecting the top and the bottom, wherein the rotatable mold member is rotatably mounted on a central pivot located between the top and bottom of the frame member and further wherein the rotatable mold plate has transverse dimensions across it between the first and second sides of the frame member which are substantially less than the distance across the opening between the first and second sides of the frame member.

(amended)
13. ¹⁷ The injection mold according to Claim ¹⁷ [12] wherein portions of the first and second mold cavity members extend past the rotatable mold plate to directly engage one another through the opening in the frame member on each side of the rotatable mold plate when the mold is closed.

(amended)
14. ¹⁷ The injection mold according to Claim ¹⁷ [1] wherein the rotatable mold plate has first and second faces and is rotated 180° in the central frame member each time the first and second mold cavity members are moved away from one another a predetermined maximum distance, whereupon each successive closure of the mold by movement of the first and second cavity members toward one another causes alternate ones of the first and second faces of the rotatable mold plate to engage corresponding portions of the first and second mold cavity members.

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15. The injection mold according to Claim 14 wherein portions of the first and second mold cavity members extend past the rotatable mold plate to directly engage one another through the opening in the frame member on each side of the rotatable mold plate when the mold is closed.

16. A method for manufacturing two-component injection molded elongated members including the steps of:

mounting first and second mold cavity members in a molding machine for relative movement toward and away from one another in each cycle of operation to close and open a mold, respectively;

locating an open frame in the closed position of the mold which surrounds and overlies at least a portion of each of the first and second mold cavity members;

placing a rotatable mold plate in the frame for rotation about an axis perpendicular to the direction of relative movement of the first and second mold cavity members toward and away from one another; and

rotating the rotatable mold plate 180° each time the first and second mold cavity members are moved away from one another to open the mold to thereupon rotate pre-forms and finished parts made in the mold 180° for each cycle of operation.